

under and inner side about the middle have two or three short stout spines, the tips straight; from there to the base are irregular hairs, some short, some long, and approaching bristles in size. On the outer edge of under side are only short hairs all along, or a few bristly hairs near the apex. Hind tibia with no even swelling or bump, but an abrupt blunt point sticking up like a tree-stump.

Described from three males, two on 28th July from Michel, British Columbia, about 4,000 feet, and one, 15th August, Gallatin County, Montana, 5,400 feet.

This latter specimen was sent me by Prof. Cooley, and I had marked it *abnormalis* thinking it such. When I took the other two I examined the interior of the hypopygium and found it distinct.

I have returned a Michel male to Prof. Cooley.

The types of all species are in the collection of the author. Paratypes will be deposited as follows: *Postleria fuscolineata*, male and female, to the U. S. National Museum, the Canadian National Collection, and to Dr. J. M. Aldrich; *Amoebaleria gigas* to the same, and also to Dr. Ferris, Leland Stanford Jr. University, Professor Cooley, Bozeman, Mont., and Dr. C. W. Johnson, Boston, Mass.; one female of *Leria aldrichi* to Dr. Aldrich; one female of *Morpholeria melaneura* to the U. S. National Museum and Canadian National Collection; one male of *Acantholeria abnormalis* to Professor Cooley.

SOME NEW MUSCOID GENERA ANCIENT AND RECENT

BY CHARLES H. T. TOWNSEND

The following new genera are proposed at this time in order that they may be included in a forthcoming treatment of the muscoid genera of the world.

AUSTENINA gen. nov.—Proposed for *Glossina brevipalpis* Newstead (1910), Ann. Trop. Med. Paras, IV, 372. Differs from *Newsteadina* by the comparatively short palpi.

AWATIA gen. nov.—Proposed for *Musca indica* Awati

(1916), Ind. Jn. Med. Res. IV, 138. Belongs in the *Philæmatomyia* group, as later pointed out by Awati, but differs from all the other forms of the group in being larviparous. It is immediately distinguished from *Pristirhynchomyia*, to which it is most closely allied, by its well developed presutural dorso-central bristles.

Berendtia gen. nov. *baltica* sp. nov. (fossil).—Proposed for *Oestrus* sp. Berendt (1830), Ins. Bernst., 34. From the Lower Oligocene of Baltic amber. The description indicates affinity with the Oestrine series of tribes.

Giebelia gen. nov. *ignota* sp. nov. (fossil).—Proposed for *Oestrus* sp. Giebel (1846), Palæozool., 278. From the Tertiary, origin unknown. Description indicates affinity with the Oestrine series.

Himantostomopsis gen. nov.—Proposed for *Himantostoma hungarica* Thalhammer (1897), Term. Fuezet. XX, 145. Differs from *Diplopota* Bezzi by the pilose parafacialia and the arcuate course of fourth vein.

Lithexorista gen. nov. *scudderi* sp. nov. (fossil).—Proposed for *Tackina* sp. Scudder (1890), Tert. Ins., 554. From the Eocene of Green River, Wyoming. The characters point to a location somewhere in the Lydelline to Exoristine series of tribes.

Lithotachina gen. nov. (fossil).—Proposed for *Echinomyia antiqua* Heer (1849), Ins Tert. Ceningen II, Nouv. Mem. Soc. Helv. Sc. Nat. XI, 247-8, pl. 17, f. 17. From the Upper Miocene of Oeningen. The characters indicate one of the Larvævorini, perhaps closely allied to the existing genus *Servillia*.

Newsteadina gen. nov.—Proposed for *Stomoxys fuscus* Walker (1849), List Dipt. Ins., III, 682. See Austen (1911), Hdb. Tsetse Flies, 76, f. 17A, for male hypopygial characters; and Evans (1919), Ann. Trop. Med. Paras. XIII, 31-56, for female hypopygial characters. The *fusca* group has long been recognized on male hypopygial characters; it may be recognized in the female by the dorsal plates being present and the mediodorsal plates absent.

Paleostomoxys gen. nov. *giebelii* sp. nov. (fossil).—Pro-

posed for *Stomoxys* sp. Giebel (1846), Palæozool., 278. From the Tertiary, origin unknown. Characters point to possible location in the Stomoxydine to Plaxemyine series.

Paleotachina gen. nov. *smithii* sp. nov. (fossil).—Proposed for *Echinomyia* sp. Smith (1868), Qu. Jn. Sc. V, 183, f. 2. From the Lower Oligocene of Baltic amber. The description indicates one of the Larvævorini or allied tribes.

Palexorista gen. nov. (fossil).—Proposed for *Tichina succini* Giebel (1862), Wirb. Ins. Bernst., Zeits. Ges. Nat. XX, 319. From the Lower Oligocene of Baltic amber. The description rather indicates one of the true tachinids, but the venation is of the sarcophagid type. The form may belong in or near the Miltogrammini.

Suiæstrus cookii gen. et sp. nov. (maggot III only).—Proposed for the material referred to in Insect Life III, 161-2, being a single third-stage maggot of œstrid aspect, labeled "4732, *Cephenemyia* on pigs, S. S. Cook, Parkersburg, W. Va.," now in U. S. N. M. Coll.

Mandibular sclerite of c. ph. skel. double, short, curved, sharply pointed. Anal stigmata showing semicircular closely approximated plates, each with six long slender strongly sinuous slits closely crowded together and an inner submarginal button, being somewhat like those of *Stasissea*. Body segments each with about three or four rows of black spines on anterior half or so, the spines being sharp, flattened, not very broad, twice or more as long as basal width. There are also scattered spines on posterior part of segments from middle of body backward. Both the spines and their arrangement are thus much as in *Cephenemyia*. Form of body elongate and subpyriform, much like *Dermatobia*. Cephalic shield absent.

Villeneuveia gen. nov.—Proposed for *Lissoglossa taeniata* Villeneuve (1913), Bull. Mus. Hist. Nat. 1912, 506-7, pl. X. Differs from *Lissoglossa* by short head, normal front and parafacialia, shortened antennæ, head chaetotaxy, only gently receding facial profile. *Lissoglossa* has the head much elongated, the front very produced, parafacialia very widened above, antennæ long, face very receding.